

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of analyzing cardiac data acquired from a patient having an electronic cardiac implant, the method comprising:
 - acquiring non-implant cardiac data from the patient with a non-implant sensor device;
 - sending the non-implant cardiac data to an analysis module;
 - acquiring implant cardiac data from the electronic cardiac implant, wherein the non-implant sensor is not coupled with the electronic cardiac ~~implant~~input;
 - sending the implant cardiac data to the analysis module;
 - synchronizing the non-implant cardiac data and the implant cardiac data;
 - correlating the non-implant cardiac data with the implant cardiac data to determine a cardiac condition of the patient, wherein the correlating step is carried out with a correlating algorithm; and
 - outputting to a display a signature pattern of the patient.
2. (Original) The method of claim 1 and further comprising selecting the non-implant cardiac data and the implant cardiac data to be correlated.
3. (Original) The method of claim 1 and further comprising assigning at least one of a date and a time to at least one of the non-implant cardiac data and the implant cardiac data.
4. (Original) The method of claim 3 and further comprising time-synchronizing the non-implant cardiac data and the implant cardiac data based on at least one of the date and time assigned to the non-implant cardiac data and the implant cardiac data.

5. (Original) The method of claim 1 and further comprising aligning the non-implant cardiac data and the implant cardiac data based on at least one fiducial point.

6. (Currently Amended) A method of determining a cardiac treatment for a patient having an electronic cardiac implant, the method comprising:

acquiring non-implant cardiac data from the patient with a non-implant sensor device;

sending the non-implant cardiac data to an analysis module;

acquiring implant cardiac data from the electronic cardiac implant, wherein the non-implant sensor is not coupled with the electronic cardiac implant~~input~~;

sending the implant cardiac data to the analysis module;

correlating the non-implant cardiac data and the implant cardiac data to generate a signature pattern; and

analyzing the signature pattern to determine a cardiac treatment for the patient; and

outputting the cardiac treatment.

7. (Original) The method of claim 6 and further comprising comparing the signature pattern with subsequently-acquired patient data to determine effectiveness of a current treatment.

8. (Original) The method of claim 6 and further comprising displaying the non-implant cardiac data and the implant cardiac data on a display monitor while a clinical condition is provoked to determine the effect of the provoked condition on the non-implant cardiac data and the implant cardiac data.

9. (Original) The method of claim 6 and further comprising synchronizing the non-implant cardiac data and the implant cardiac data.

10. (Currently Amended) A method of developing criteria for a diagnosis of a cardiac condition in a patient having an electronic cardiac implant, the method comprising:

acquiring non-implant cardiac data from the patient with a non-implant sensor device;

sending the non-implant cardiac data to an analysis module;

acquiring implant cardiac data from the electronic cardiac implant, wherein the non-implant sensor is not coupled with the electronic cardiac implant~~input~~;

sending the implant cardiac data to the analysis module;

synchronizing the non-implant cardiac data and the implant cardiac data;

correlating the non-implant cardiac data and the implant cardiac data to generate a signature pattern;

assigning a diagnosis of a cardiac condition to the signature pattern;

storing the signature pattern; and

comparing the stored signature pattern to subsequently-acquired implant cardiac data to diagnose the cardiac condition based on implant cardiac data only.

11. (Original) The method of claim 10 and further comprising selecting the non-implant cardiac data and the implant cardiac data to be correlated.

12. (Original) The method of claim 10 and further comprising assigning at least one of a date and a time to the non-implant cardiac data and the implant cardiac data.

13. (Original) The method of claim 12 and further comprising time-synchronizing the non-implant cardiac data and the implant cardiac data based on at least one of the date and time assigned to the non-implant cardiac data and the implant cardiac data.

14. (Original) The method of claim 10 and further comprising aligning the non-implant cardiac data and the implant cardiac data based on at least one fiducial point.

15. (Currently Amended) A patient monitoring system for analyzing cardiac data acquired from a patient having an electronic cardiac implant, the system comprising:

a transmitter that generates a polling signal;

a receiver that receives implant data when the implant responds to the polling signal; ~~and~~

a computer-readable medium encoded with a software program, the software program sets forth rules for:

a data acquisition module that acquires non-implant cardiac data from the patient, wherein the data acquisition module is not coupled with the receiver, and

an analysis module that correlates the implant cardiac data and the non-implant cardiac data and generates a signature pattern from the correlation; and

a processor, the processor configured to execute the software program and carry out the rules for the data acquisition module and the analysis module.

16. (Original) The system of claim 15 and further comprising a wireless device operable to interrogate the implant, receive the implant cardiac data, and transmit the implant cardiac data to the receiver.

17. (Original) The system of claim 15 and further comprising a network wherein the patient monitoring system is adapted to communicate with additional devices that are connected to the network.

18. (Original) The system of claim 17 wherein the data acquisition module acquires via the network implant cardiac data and non-implant cardiac data stored in the additional devices.

19. (Original) The system of claim 15 and further comprising displaying at least one of the non-implant cardiac data, the implant cardiac data, and the signature pattern on a display monitor remote from the patient monitoring system.

20. (Currently Amended) A method of determining a cardiac treatment for a patient having an electronic cardiac implant, the method comprising:

- acquiring patient data with a non-implant sensor device;
- sending the non-implant cardiac data to an analysis module;
- acquiring electronic cardiac implant data from the implant, wherein the non-implant sensor is not coupled with the electronic cardiac implantinput;
- sending the implanted cardiac data to the analysis module;
- correlating the patient data and the implant data with a correlating algorithm to determine a cardiac treatment for the patient; and
- generating a signature pattern of the patient.